7.0 NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT

With the adoption of the Third Term Permits in early 2002, the Permittees were required modify their current New Development/Significant Redevelopment Program (**1993 DAMP Appendix G**) to meet new permit requirements.

The goals for the updated New Development/Significant Redevelopment Program are to provide the Permittees with:

- A program framework for reducing the adverse impacts that new development and significant redevelopment may have on water quality
- Methodologies to meet NPDES permit requirements

This section and its exhibits provide the new countywide Model New Development/Significant Redevelopment Program (Model Program). The Model Program is intended to be implemented as described in **DAMP Section A-7** of each Permittee's Local Implementation Plan. In developing its Local Implementation Plan, the Permittee may modify the Model Program in response to local conditions. It is not the intent for this Model Program to restrict city or county planning commissions or their governing bodies from imposing additional stormwater management requirements as a condition of development.

7.1 Regulatory Requirements

The federal stormwater regulations specify that drainage area management plans include "a description of planning procedures including a comprehensive master plan to develop, implement, and enforce controls to reduce the discharge of pollutants...from areas of new development and significant redevelopment."

The Regional Boards have identified a need for individual stormwater quality management plans to apply equally to private and public agency projects. Transportation corridors, schools, parks, flood control projects and other public facilities are thus subject to the same requirements as planned communities and mini-malls.

The New Development/Significant Redevelopment Program was developed (see **DAMP Section 7.3**) as a model for fulfilling the new development and significant redevelopment commitments and requirements of:

- Section XII of the Santa Ana Regional Water Quality Control Board Municipal NPDES Stormwater permit, Order No. R8-2002-0010
- Section F.1 of the San Diego Regional Water Quality Control Board Municipal NPDES Stormwater permit, Order No. R9-2002-0001

Although there is a provision in the State regulations that school districts must obtain municipal approval for "improvements which affect drainage", the Government Code effectively prevents city/county regulation of many federal and state agencies and local special districts. The First

and Second Term Permits, however identify these entities as potential dischargers of stormwater to the Orange County drainage areas and the expectation is that these entities will work cooperatively with the Permittees to manage urban runoff and stormwater pollution. These entities include: Caltrans, universities and colleges, Metropolitan Water District, Department of Defense, school districts, sanitation districts, water districts and railroads. During the Third Term Permit, regulation of a number of these is expected under Phase II of the Federal stormwater regulations.

7.2 Program Development

The regulatory requirements and permit conditions have necessitated the development of a program to ensure that stormwater quality management is considered during a project's planning phase, implemented during construction, and ultimately maintained for the life of the project

7.2.1 First and Second Term Permit

In 1993, the New Development/Construction Task Force, comprised of representatives from the Principal Permittee, Building Industry Association (BIA), Association of General Contractors (AGC) and Civil Engineers & Land Surveyors of California (CELSOC), completed a report that provided the basis for requiring the incorporation of structural and non-structural Best Management Practices (BMPs) into new development and significant redevelopment. The report, entitled "Best Management Practices For New Development Including Nonresidential Construction Projects (1-5 acres)" (**1993 DAMP Appendix G**), involved additional contributions on specific BMPs from the Western States Petroleum Association (WSPA), Food Sanitation Advisory Council (FSAC), and Orange County's sanitary districts.

At the end of this process, the Permittees had developed an effective and flexible program for new development and significant redevelopment that allowed a strong focus to be placed on constituents of concern identified through the monitoring program and water quality planning process.

In 1997 the Permittees certified that they were implementing the **1993 DAMP Appendix G**. Since that time, the Permittees and development industry have gained considerable experience in implementing over a thousand Water Quality Management Plans (WQMPs) countywide. The **1993 DAMP Appendix G** contained the following elements:

- Each new private development and significant redevelopment is required to implement appropriate "routine" non-structural BMPs in keeping with the size and type of development, to minimize the introduction of pollutants into the drainage system (i.e. educational materials, landscape management, spill contingency plans, litter control, employee training, street sweeping).

- Each new private development and significant redevelopment is required to implement appropriate "routine" structural BMPs in keeping with the size and type of development.

"Routine" structural BMP's are economical, practicable, small scale-measures, which can be feasibly applied at the smallest unit of development, using standard plans developed by the New Development/ Construction Task Force. Routine structural BMP's may function either to minimize the introduction of pollutants into the drainage system or to remove pollutants from the drainage system and are intended to address drainage water quality impacts inherent in development, and need not be related to any identified water quality problem (i.e. filtration, efficient irrigation, landscape design, car wash racks, trash container areas, motor fuel concrete dispensing areas and canopies, catch basin stenciling, water quality inlets).

- "Special" structural BMPs are to be installed in new development and significant redevelopment to address specific water quality problems identified in the water quality monitoring program or the water quality planning process. This requirement may be addressed by providing an on-site "special" structural BMP, or by contributing to the implementation of a structural BMP specified within a watershed plan.

  "Special" structural BMP's are engineered facilities designed to address specific pollutant problems identified in the water quality planning process, runoff management plan, CEQA process, or similar watershed planning. However, it was not the intent of this program to restrict city or county planning commissions or their governing bodies from imposing additional stormwater management requirements as a condition of development (i.e. water quality ponds, dry/wet basins).

- Each new private development or significant redevelopment is required to prepare a Project WQMP specifying the "routine" structural and non-structural BMPs (and any "special" BMPs) that will be used on site for approval by the Permittee with jurisdiction over the site (single family residences may be exempted from this requirement).

- Each private grading permit applicant with a development greater than five (5) acres is required to provide proof of coverage under Construction Permit.

- Each private commercial or industrial project 1-5 acres is required to have special construction notes on the building plans and grading plans.

Tables 1 and 2 of the **1993 DAMP Appendix G** provide an outline of standard practice site specific structural and non-structural BMPs for categories of development such as residential, industrial, retail/office centers, restaurants, warehouses/grocery, fuel dispensing areas and vehicle repair/maintenance facilities

In early 2001, to prepare for the Third Term Permits, the Permittees began the process of re-establishing the New Development/Construction Task Force. During the initial meetings of the Permittees, it was determined that the Task Force should provide a technical review role that would be able to provide feedback on either the proposed controls themselves or the impact of their implementation.

The following participants were identified to participate in the Task Force:

Permittees	Additional Members
County of Orange	Association of General Contractors
City of Anaheim	American Planners Association
City of Brea	American Society of Civil Engineers
City of Huntington Beach	Building Industry Association
City of Irvine	California Association of Community Managers
City of Laguna Beach	Food Sanitation Advisory Council
City of Orange (Chair)	Irvine Ranch Water District
City of San Clemente	Orange County Water District
City of San Juan Capistrano	Orange County Sanitation District
City of Westminster	Rancho Mission Viejo
	South Orange County Wastewater Authority
	The Irvine Company
	Vector Control District
	Western States Petroleum Association
	Non-Affiliated Technical Experts
	Representatives of the Santa Ana and San Diego Regional Water Quality Control Boards as Ex-Officio Members

With the adoption of the Third Term Permits in early 2002, the Permittees were required to begin to modify their current New Development/ Significant Redevelopment Program (**1993 DAMP Appendix G**) to meet new permit requirements.

7.3 Model New Development/Significant Redevelopment Program

7.3.1 Introduction

The Model Program provides a framework and a process for following the requirements to incorporate watershed protection/stormwater quality management principles into the Permittees' General Plan process, environmental review process, and development permit approval process, as required by the Third Term Permits. The Model Program also defines requirements and provides guidance for compliance with the requirements for project specific planning, selection, and design of BMPs in a new development or significant redevelopment project. The program covers initial project planning through design, construction and completion, including requirements for long-term maintenance of permanent BMPs. Detailed requirements for construction phase BMPs and procedures are contained in the Construction Model Program (**DAMP Section 8.4).**

7.3.2 Model Program Requirements and Objectives

Each Permittee is required to minimize short and long-term impacts on receiving water quality from new development and significant redevelopment to the maximum extent practicable and must at a minimum:

1) Assess the need to revise and update General Plans to include watershed and stormwater quality and quantity management considerations. (Section XII of Santa Ana Region Permit, Section F.1 of the San Diego Region Permit)

2) Review CEQA process for potential stormwater quality impacts and mitigation. (Section XII of Santa Ana Region Permit, Section F.1 of San Diego Region Permit)

3) Review Development Planning/Permit approval process for stormwater protection principles. (Section XII of Santa Ana Region Permit, Section F.1 of the San Diego Region Permit)

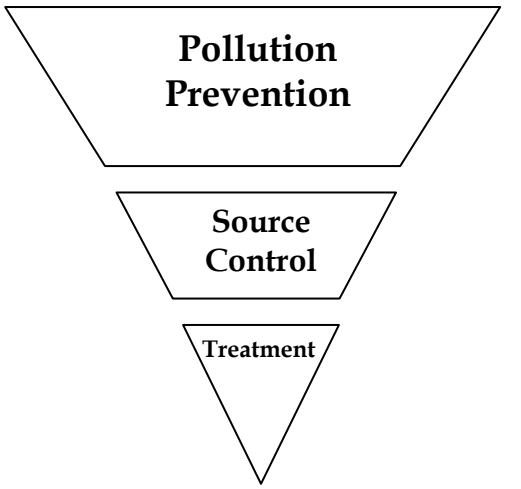
4) Review existing BMPs and develop Model WQMP (also referred to as a Standard Urban Stormwater Mitigation Plan – SUSMP) to address impact from new and significant redevelopment. (Section XII of Santa Ana Region Permit, Section F.1 of the San Diego Region Permit)

5) Conduct education or training for Model Environmental Review Program elements. (Section XII of Santa Ana Region Permit, Section F.1 of the San Diego Region Permit)

The overall objective of the Model Program is to provide guidance to the Permittees on how to implement the Third Term Permit requirements into their respective General Plan and environmental review and development permit processes. The Model Program will address the specific requirements contained in the Third Term Permits with distinctions as appropriate where the permits differ in their requirements.

Use of the procedures in the Model Program are intended to promote countywide consistency among the Permittees, which provides for uniform receiving water quality protection and program effectiveness assessment. The Model Program is based upon a three-tiered approach for reducing the potential impact of new development and significant redevelopment projects on water quality. The three tiers are Pollution Prevention, Source Control, and Treatment, as shown in **Figure 7-1**.

Figure 7-1. Program Approach



Pollution Prevention controls are emphasized and will be used as the first line of defense and include measures such as education for property owners and tenants and occupants and common areas landscape maintenance. Source Control BMPs will be included in new development and significant redevelopment projects to further reduce the amount of pollutants released into the environment and Treatment Control BMPs will be incorporated as described later to further supplement the Pollution Prevention and Source Control BMPs by actually treating the water to remove the pollutants.

For the purposes of this section of the DAMP, the following definitions apply:

Pollution Prevention - any practice that reduces or eliminates the creation of pollutants.

Source Controls - practices that prevent pollution by reducing pollutants at their source.

Treatment Controls - practices that remove pollutants from the water.

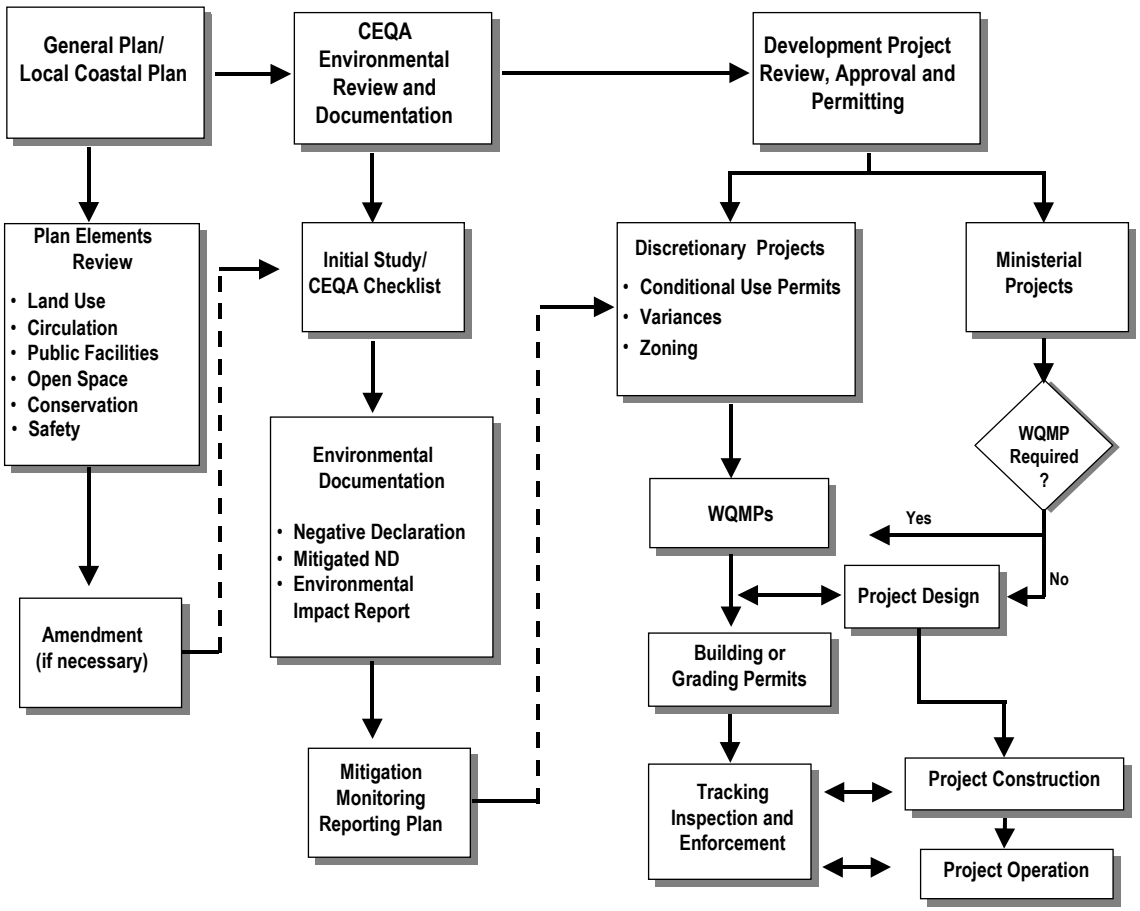
7.3.3 Model Program Overview

The Model Program links new development BMP design, construction and operation to the earlier phases of new development project planning encompassed by the General Plan,

environmental review process, and development permit approval processes. A City/County General Plan specifies policies that guide new development. The environmental review process examines impacts from proposed new development with respect to the General Plan policies and many environmental issues, including water quality, and includes consideration of mitigation measures to reduce any identified significant impacts.

The development permit approval process carries forth mitigation requirements in the form of conditions of approval, design specifications, tracking, inspection and enforcement actions. These three "front-end" planning processes must be coordinated and linked to the later phases of BMP design, construction and operation for new development and significant redevelopment projects to help ensure stormwater quality protection features are planned, designed and evaluated in accordance with City/County goals for protection of water quality and other environmental resources. **Figure 7-2** is a generalized flow diagram that depicts the relationship of the General Plan, environmental review process and development planning and permit process, as well as the project design, construction, and operation phases.

Figure 7-2. Relationship between General Plan, Environmental Review Process and Development Permit Process



7.3.4 Contents of Model Program

The guidance provided by the Model Program is presented in the following subsections:

- Section 7.4 - General Plan Assessment and Amendment describes the process for the Permittees to assess their existing General Plans and make any needed amendments to include watershed and stormwater quality and quantity management considerations.
- Section 7.5 - CEQA Environmental Review Process provides guidance for utilizing/revising checklists and guidance for conducting environmental review for stormwater quality impact assessment.
- Section 7.6 - Development Project Review, Approval and Permitting provides policies and procedures for project plan review including information pertaining to discretionary permits, ministerial permits, Project WQMP requirements, tracking, inspection and enforcement. The guidance and procedures for Project WQMP preparation and for selection and design of regional/watershed and site specific BMPs is provided in Exhibit 7.II, Model WQMP.
- Section 7.7 - Post Construction BMP Inspection and Verification provides information on the periodic review of approved Project WQMPs
- Section 7.8 - Model Program Training and Outreach provides general information on the training modules that have been developed for use by each Permittee in informing municipal staff, developers and contractors.
- Section 7.9 - Annual Reporting and Assessing Program Effectiveness describes the annually reporting on the implementation and effectiveness of the New Development /Significant Redevelopment Program by the Permittees.

7.4 General Plan Assessment and Amendment

7.4.1 Introduction

Each Permittee is required by the Third Term Permits to minimize short and long-term impacts on receiving water quality from new development and significant redevelopment to the maximum extent practicable. With regard to the General Plan, the Permittees must at a minimum review and update General Plans, as necessary, to ensure watershed and stormwater quality and quantity management are considered.

This section of the Model Program addresses these General Plan assessment requirements:

- The San Diego Region Permittees must provide a work plan as part of its submittal on February 13, 2003 with a time schedule detailing any changes to its General Plan regarding water quality and watershed protection.

- The Santa Ana Region Permittees must review their General Plan by December 19, 2002 to ensure urban-runoff related issues are properly considered and addressed. The findings of this review and the actions taken by the Santa Ana Region Permittees must be reported to the Santa Ana Regional Board by January 2, 2003. Each Santa Ana Region Permittee must provide the Santa Ana Regional Board with the draft amendment or revision when a pertinent General Plan element or the General Plan is noticed for public comment.

The next section provides background on the General Plan and Local Coastal Program followed by a process for reviewing and amending General Plans, as necessary, to incorporate water urban runoff and stormwater pollution issues.

7.4.2 Background on the General Plan and Local Coastal Program

7.4.2.1 General Plan

Under California State law (California Government Code §65300) each city and county in California must prepare a comprehensive, long-term General Plan for the physical development of its community. The General Plan must consist of a statement of development policies and include a diagram(s) and text setting forth objectives, principles, standards and plan proposals (California Government Code §65302).

The General Plan consists of seven mandatory elements and any optional element that a city or county chooses to adopt. The mandatory elements include:

- Land Use
- Open Space
- Circulation and Infrastructure
- Conservation

- Housing
- Safety
- Noise

Any optional elements that are adopted by a city/county, such as Public Facilities, have equal authority as the mandatory elements. The legislative body of each city (the city council) and each county (the board of supervisors) adopts zoning, subdivision and other ordinances to regulate land uses and to carry out the policies in the General Plan. The plan is also used to guide decision-makers in determining whether or not land use proposals are consistent with the applicable goals, objectives, and policies.

7.4.2.2 General Plan Amendment Process

A General Plan Amendment is a request to revise some component of the City's or County's General Plan. This can include addition, deletion or modification of goals and policies; modifications to the land use map or other diagrams; or other changes. A General Plan Amendment is a legislative act. Under State law, General Plan Amendments are allowed four times per year (California Government Code §65358(b)).

A General Plan Amendment must be approved by the Planning Commission and City Council or at the County level by the Board of Supervisors at public hearings. In approving a General Plan Amendment, the approving body must assess the policy implications of the proposed General Plan Amendment and the impact and compatibility of the proposed General Plan Amendment on the long-term goals and desires of the City or County and its citizens.

Most General Plan Amendments are carried out in conjunction with a specific development proposal, although the City, County, or any other agency or party can request an amendment without a specific development proposal in mind.

In evaluating a proposed General Plan Amendment, the approving body must look at the "global" impacts of the proposed amendment. Although a General Plan Amendment may be proposed in conjunction with a specific development proposal, the amendment proposed might have policy and/or land use impacts far beyond any given project or property. General Plan Amendments are frequently proposed in conjunction with other legislative acts such Zone Changes, Zone Text Amendments and Local Coastal Program Amendments.

7.4.2.3 Local Coastal Program

The California Coastal Commission (Commission) was established in 1972 and made permanent by the Legislature in 1976 (via the Coastal Act). The primary mission of the Commission, as the lead agency responsible for carrying out California's federally approved coastal management program, is to plan for and regulate land and water uses in the coastal zone consistent with the policies of the Coastal Act.

California's coastal management program is carried out through a partnership between state and local governments. Implementation of Coastal Act policies is accomplished primarily through the preparation of local coastal programs (LCPs) that are required to be completed by

each of the counties and cities located in whole or in part in the coastal zone. Completed LCPs must be submitted to the Commission for review and approval. In Orange County, the cities responsible for preparing an LCP include Seal Beach, Huntington Beach, Newport Beach, Laguna Beach, Dana Point and San Clemente. The County also has areas subject to an LCP.

The objective of an LCP is to protect coastal resources, provide greater access and recreational opportunities for the public's enjoyment, while allowing for orderly and well-planned urban development and the siting of coastal-dependent and coastal-related industry. The plan incorporates, to the maximum possible extent, local plans and policies that are consistent with the Coastal Act.

An LCP includes a land use plan, which is the relevant portion of the local General Plan, including any maps necessary to administer it, the zoning ordinances, zoning district maps, and other legal instruments necessary to implement the land use plan. Coastal Act policies are the standards by which the Commission evaluates the adequacy of LCPs (Public Resources Code §30108.6).

After certification of the land use plan and zoning components of the LCP, the review authority for new development within the coastal zone, which is now vested in the Coastal Commission, is returned to local government. Development within the coastal zone may not commence until a coastal development permit has been issued by either the Commission or a local government that has a Commission-certified LCP The local government, in issuing coastal development permits after certification, must make the finding that the development is in conformity with the approved LCP.

7.4.2.4 Local Coastal Program Amendment Process

Any amendments to a certified LCP have to be approved by the State Coastal Commission. To ensure that coastal resources are effectively protected in light of changing circumstances, such as new information and changing development pressures and impacts, the Commission is required to review each certified LCP at least once every five years (California Coastal Commission 2002).

7.4.3 Plan for Assessing General Plan Elements and Local Coastal Program

The San Diego Region Permit states:

> "Each Permittee's General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) shall include water quality and watershed protection principles and policies to direct land use decisions and require implementation of consistent water quality protection measures for development projects."

The Santa Ana Region Permit states:

> "Permittees shall review their watershed protection principles and policies in their General Plan or related documents (such as Development Standards, Zoning Codes, Conditions of

Approval, Development Project Guidance) to ensure that these principals and policies are properly considered and are incorporated into these documents."

The Permittees recognize the importance of addressing watershed protection and stormwater quality control in the land development process. The Permittees are requiring that stormwater quality BMPs be included in plans for new development and significant redevelopment.

Therefore, in accordance with State Planning and Zoning Law which provides that requirements placed on land development projects must be compatible with a community's General Plan and Local Coastal Program, watershed protection principles and stormwater pollution control objectives for land development should be reflected in the appropriate policies, goals, and objectives of each Permittee's General Plan and LCP.

Many of the general plan elements contain existing goals and policies that can be related to watershed protection and stormwater pollution control. For example, stormwater quality may be controlled by the type, location, and density of development. Such controls may be established through policies commonly found in the Land Use and Open Space Elements of the General Plan (e.g., development policies, development location guidelines, landscaping guidelines, open space policies, policies on preservation of and integration with natural features).

Development of local streets and roads, regulated under the policies of the Circulation and Infrastructure Element and to some extent, the Safety Element, results in increased impervious surfaces and accumulation of stormwater pollutants from vehicles. The Public Facilities Element provides management policies for construction, operation and maintenance of various public facilities including as flood control channels and storm drains, which convey stormwater runoff. The Conservation Element contains policies on water conservation that can be linked to water quality protection through efficient use of irrigation systems to prevent runoff.

The Permittees will review their General Plan Elements and LCP (if a coastal city with an approved LCP) that cover land development issues, for which it may be appropriate to reflect watershed protection and stormwater quality management policies.

This will include review of goals and policies in the following General Plan Elements:

- Land Use;
- Safety;
- Circulation and Infrastructure (i.e., transportation);
- Public Facilities;
- Open Space; and
- Conservation.

Permittees will review development goals and policies, landscaping policies and requirements, open space goals and policies including preservation or integration with natural features, water conservation policies, and public facilities operation and maintenance policies of these Elements. When reviewing the General Plan Elements and LCPs, special attention will be given

to how the element/plan addresses water quality protection from urban runoff and stormwater pollution. The Permittees will keep in mind the following questions during this review, which may trigger the need for specific urban runoff and stormwater pollution protection policies in the General Plan and LCP either as new policies and objectives or amended text to existing policies and objectives:

1) Are there sensitive water resources in the jurisdiction?

2) Are there existing Total Maximum Daily Loads (TMDLs) or other such regulations pertaining to receiving waters within the jurisdiction?

3) Is major new development or significant redevelopment expected?

4) Are major new infrastructure projects anticipated (e.g. roads, sewer, flood control, storm drains)?

5) Does urban runoff and stormwater pollution affect recreational use of water bodies within the jurisdiction?

Upon review of the Permittees General Plan Elements and LCP, the Permittees will determine which sections should be modified, if any, to include specific policies and objectives that address water quality protection as specified in the San Diego Region and Santa Ana Region Permits (See **DAMP Section 7.4.4** following).

Most of the Permittees' General Plans contain existing provisions in these various elements that protect water quality and the environment. Therefore, adapting a General Plan to incorporate water quality protection/stormwater quality management principles may be determined to be unnecessary, or it may be determined to be as simple as modifying existing text so that it specifically includes stormwater quality and protection policies and objectives, as outlined in the Permits. Additional policies, goals, or objectives that stress the importance of stormwater quality control or to implement certain types of stormwater management programs may be beneficial in the General Plans of cities expecting major growth and have sensitive water resources within their jurisdictions. The need for and the extent of revisions to the General Plan will need to be coordinated with each Permittee's legal counsel.

7.4.4 Consideration of Additional Water Quality and Watershed Protection Concepts in General Plan and Local Coastal Program

The Permittees will review and consider the following additional objectives to the General Plan and Elements, and LCPs as specified by the Third Term Permits, respectively:

San Diego Region Permit:

1) Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and significant redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.

2) Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source runoff and pollutants offsite and into an MS4 (municipal storm drain).

3) Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

4) Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

5) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads and flows.

6) Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

7) Reduce pollutants associated with vehicles and increasing traffic resulting from development. Coordinate local traffic management reduction efforts with Orange County Transit Authority's Congestion Management Plan.

8) Post-development runoff from a site shall not contain pollutant loads that cause or contribute to an exceedance of receiving water quality objectives and which have not been reduced to the maximum extent practicable.

Santa Ana Region Permit:

1) Limit disturbance of natural water bodies and drainage systems; conserve natural areas; protect slopes and channels; and minimize impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.

2) Minimize changes in hydrology and pollutant loading; require incorporation of control, including structural and non-structural BMPs, to mitigate the projected increases in pollutant loads and flows; ensure that post-development runoff rates and velocities from a site have no significant adverse impact on downstream erosion and stream habitat; minimize the quantity of stormwater directed to impermeable surfaces and the MS4s (municipal storm drain); and maximize the percentage of permeable surfaces to allow more percolation of stormwater into the ground;

3) Preserve wetlands, riparian corridors, and buffer zones and establish reasonable limits on the clearing of vegetation from the project site;

4) Encourage the use of water quality wetlands, biofiltration swales, watershed-scale retrofits, etc., where such measures are likely to be effective and technically and economically feasible;

5) Provide for appropriate permanent measures to reduce stormwater pollutant loads in stormwater from the development site; and,

6) Establish development guidelines for areas particularly susceptible to erosion and sediment loss.

For further reference, the Permittees may review the sample general plan amendment text and sample urban runoff water quality general plan element outlined in *Model Urban Runoff Program, A How to Guide for Developing Urban Runoff Programs for Small Municipalities (City of Monterey, et al, July 1998).*

If a Permittee, in consultation with its legal counsel, determines the need to amend its General Plan or LCP (if applicable) to incorporate watershed and stormwater management principles, they will do so whenever elements of a Permittee's General Plan or LCP are significantly rewritten or by the July 1, 2004 date specified by the Santa Ana Region Permit. As part of any General Plan Amendment, maps will be revised, as necessary, to reflect location-specific watershed protection/stormwater quality management policies, and eliminate conflicts among land use districts, permitted land uses, and stormwater-specific goals and policies.

7.5 CEQA Environmental Review Process Modifications

7.5.1 Introduction

Each Permittee is required by the Permits to minimize short and long-term impacts on receiving water quality from new development and significant redevelopment to the maximum extent practicable. The Santa Ana Region Permit (Section XII.A.3) requires the Permittees to review their California Environmental Quality Act (CEQA) document preparation process to ensure urban runoff and stormwater pollution-related issues are properly considered and addressed. If necessary, the processes should be revised to consider and mitigate impacts to stormwater quality. The San Diego Region Permit (Section F.1.C) requires to the extent feasible that the Permittees revise their current environmental review process to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures.

The San Diego Region Permittees must revise their environmental review process by February 13, 2003. The Santa Ana Region Permittees must review their CEQA documentation processes by December 19, 2002 to ensure urban-runoff related issues are properly considered and addressed.

The next section provides background on the CEQA environmental review process followed by a series of revisions that the Permittees will implement to ensure that urban runoff and stormwater pollution issues are incorporated in the process.

7.5.1.1 Background on CEQA

The California Environmental Quality Act (CEQA) applies to all discretionary activities proposed to be carried out or approved by the cities and County, unless an exemption applies. CEQA applies to public and private sector activities that require discretionary City/County approvals. The basic goal of CEQA (Public Resources Code §21000 *et seq.*) is to develop and maintain a high-quality environment now and in the future, while the specific goals of CEQA are for the cities/County and other public agencies to:

1) Identify the significant environmental effects of their actions; and, either
2) Avoid those significant environmental effects, where feasible; or
3) Mitigate those significant environmental effects, where feasible.

The implementation of CEQA is regulated by the Secretary for Resources, via the Office of Planning and Research's "State CEQA Guidelines" (Guidelines) (California Code of Regulations Title 14, Chapter 3, §15000 through 15007). These Guidelines are binding on all cities/counties and other public agencies in California.

There are three phases for implementing CEQA. These include:

- Preliminary review of a project to determine whether it is subject to CEQA.
- Preparation of an Initial Study to determine whether the project may have a significant environmental effect.

- Preparation of an Environmental Impact Report (EIR) if the project may have a significant environmental effect or a Negative Declaration or Mitigated Negative Declaration if no significant effects will occur (Guidelines §15002(k)).

7.5.1.2 Preliminary Review

Once an application for permits, approvals, or other entitlements has been submitted to the Lead Agency for CEQA review, the Lead Agency has 30 days to review the application for completeness. For private sector projects, the Lead Agency may require submittal of baseline environmental setting and detailed project description information to enable the Lead Agency to prepare the Initial Study. Appendix H of the CEQA Guidelines provides a sample project application form. Lead Agencies can rely on the sample form, but are free to devise their own project application forms (Guidelines §15002(k), to include, for example, specific information on BMPs.

7.5.1.3 Initial Study

The Lead Agency must conduct an Initial Study to determine if the project may have a significant effect on the environment. If the Lead Agency can determine that an EIR will clearly be required for the project, an Initial Study is not required but may still be desirable. (§15063). The Initial Study typically consists of the project applicant information obtained during the preliminary review process, the completed Initial Study checklist and required checklist explanations. An Initial Study checklist is provided in Appendix G of the CEQA Guidelines that covers all environmental topics for the Lead Agency to consider during the Initial Study, including Hydrology/Water Quality. All entries on the checklist must be explained during the Initial Study process. Lead Agencies are free to devise their own Initial Study checklists for use in the Initial Study process (Guidelines §15002(k). This may include more detailed questions related to urban runoff and stormwater pollution, if the Lead Agency deems appropriate for its jurisdiction.

7.5.1.4 Environmental Impact Report (EIR)

An EIR must be prepared if the proposed project may have a significant environmental effect. The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR focuses primarily on the changes in the environment that would result from the development project. The EIR examines all phases of the project including planning, construction, and operation (§15161).

Immediately after deciding that an EIR is required for a project, the Lead Agency sends to each Responsible Agency a Notice of Preparation (NOP) stating that an EIR will be prepared. For water quality issues, responsible agencies would include the State Water Resources Control Board (State Board), the respective Regional Boards, the U.S. Army Corps of Engineers (for projects with discharges of dredge/fill into waters of the U.S.) and California Department of Fish and Game (for alternations of streambeds affecting waters of the state). This notice is also sent to every federal and state agency involved in approving or funding the project and to each Trustee Agency responsible for natural resources affected by the project. The NOP must provide the Responsible Agencies with sufficient information describing the project and the

potential environmental effects. The responses from the NOP assist in identifying the significant environmental issues and reasonable alternatives and mitigation measures that the Responsible Agency will need to explore in the draft EIR. (§15082). If water quality issues are identified as a significant environmental issue, then water quality would be discussed in the environmental setting (baseline), impact, and, if applicable, mitigation sections of the EIR.

7.5.1.5 Negative Declaration

A public agency prepares a Negative Declaration or Mitigated Negative Declaration for a project subject to CEQA when:

1) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

2) The initial study identifies potentially significant effects, but:

    a) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

    b) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment. (§15070)

A Negative Declaration circulated for public review must include a brief description of the project; the location of the project; a proposed finding that the project will not have a significant effect on the environment; an attached copy of the Initial Study documenting reasons to support the finding; and mitigation measures, if any, included in the project to avoid potentially significant effects. (§15071) Water quality issues are addressed in a Negative Declaration in the Initial Study and if applicable, mitigation measures are developed.

7.5.2 Revisions to the CEQA Initial Study Process

The San Diego Region Permit (Section F.1.C) requires to the extent feasible that the Permittees revise their current environmental review process to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures. The San Diego Region Permit lists the following questions for consideration in the environmental review process to address increased pollutants and flows from proposed projects:

a) Could the proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g. heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).

b) Could the proposed project result in significant alternation of receiving water quality during or following construction?

c) Could the proposed project result in increased impervious surfaces and associated increased runoff?

d) Could the proposed project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?

e) Could the proposed project result in increased erosion downstream?

f) Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?

g) Is the project tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?

h) Could the proposed project have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?

i) Could the proposed project have a potentially significant adverse impact on groundwater quality?

j) Could the proposed project cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?

k) Can the project impact aquatic, wetland, or riparian habitat?

The Santa Ana Region Permit (Section XII.A.3) requires the Permittees to review their CEQA document preparation process to ensure urban runoff and stormwater pollution-related issues are properly considered and addressed. If necessary, the processes should be revised to consider and mitigate impacts to stormwater quality. The Santa Ana Region Permit lists the following potential impacts to be considered during CEQA review:

a) Potential impact of project construction on stormwater runoff;

b) Potential impact of project's post-construction activity on stormwater runoff;

c) Potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas;

d) Potential for discharge of stormwater to affect the beneficial uses of the receiving waters;

e) Potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm; and

f) Potential for significant increases in erosion of the project site or surrounding areas.

These urban runoff and stormwater pollution issues will be considered in the Initial Study process (project application forms and checklists) and in the preparation and reviews of EIRs discussed in the following sections.

7.5.2.1 Project Application Form

The current project application form contained in Appendix H of the CEQA Guidelines (State of California Office of Planning and Research, February, 2001) contains many questions about the project to help environmental planners assess the potential for significant environmental impacts. However, there are no specific project description questions that help characterize the potential for urban runoff and stormwater pollution impacts. The Permittees will review their existing project application forms and, as deemed necessary, will revise the form to include line items for:

- Expected percent change in pervious surface area of the site; and
- Submittal of preliminary Project WQMP, if applicable, (along with required submittal of other development plans).

7.5.2.2 Initial Study Checklist

The current Initial Study Checklist contained in Appendix G of the CEQA Guidelines (State of California Office of Planning and Research, February 2001) was recently updated and is used by nearly all Permittees in their environmental review process. This Checklist contains the following considerations under the environmental impact category "Hydrology and Water Quality (Section VIII):

Would the project:

a) Violate any water quality standards or waste discharge requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

The Permittees have concluded that urban runoff and stormwater pollution considerations are generally covered in questions a) through f) of the CEQA Guidelines Appendix G checklist, but in some cases with less specificity than the questions provided in both the San Diego and Santa Ana Region Permits. To ensure that the Initial Study thoroughly considers all issues listed in the Permits, the Permittees will review the Initial Study checklist and determine whether to include some or all of the additional considerations provided in the Third Term Permits.

The Permittees will also consider adding the following question to the Hazardous and Hazardous Materials Section (Section VII) or Utilities and Service Systems Section (Section XVI) of the checklist:

> Would the project include a new or retrofitted stormwater Treatment Control BMPs, (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?

To promote the consideration of all of the various impacts related to urban runoff and stormwater pollution as identified in the Third Term Permits, the Permittees may provide the list of permit considerations to:

- Environmental planning staff for use in preparing and reviewing CEQA documents for internal city/county projects and when reviewing CEQA documents prepared by the private sector
- Consultants and other members of the private sector for use in preparing CEQA documents for private and public sector projects
- Project applicants during the CEQA preliminary review process
- Participants attending training programs

7.5.3 Environmental Review Guidance for CEQA Initial Studies and CEQA Document Preparation and Review

The guidance in **Exhibit 7.I** may be used by the Permittees in evaluating the CEQA Initial Study checklist questions in Section VIII. Hydrology and Water Quality including any additional questions included by the Permittees in response to the San Diego and Santa Ana Region Permits. This guidance is also applicable to the review and preparation of CEQA documents including Negative Declarations, Mitigated Negative Declarations and EIRs. This guidance will be reviewed annually, updated as needed, and its status/use will be discussed in the Annual Progress Report.

7.6 Development Project Review, Approval, and Permitting

7.6.1 Introduction

The Third Term Permits require that the Permittees address the following elements that affect development project review, approval, and permitting

- Modify Project WQMP requirements by imposing additional BMP requirements for new development and significant redevelopment projects that fall under "Priority Project" categories.
- Review and revise standard conditions of approval and plan check procedures to ensure that the short and long-term impacts of new development and significant redevelopment on receiving water quality are minimized and that watershed protection principles are incorporated into project plans. (To support this objective, Permittees shall also review their standard conditions of approval, plan check procedures , and permit conditions to ensure that they are not in conflict with any provisions of the Santa Ana Region Permit or the San Diego Region Permit (as applicable), the DAMP, California's General Permit for Stormwater Discharges Associated with Construction Activity, California's General Permit for Stormwater Discharges Associated with Industrial Activity and adopted Total Maximum Daily Load allocations within their jurisdiction).

The Santa Ana Permit uses the term WQMP to describe the overall program that Permittees adopt to define the existing and expanded requirements for incorporating BMPs into new development and significant redevelopment. The San Diego Permit uses the term Standard Urban Stormwater Mitigation Plan (SUSMP) for the overall program requirements. The terms WQMP and SUSMP are also used to define the project-specific plan for BMPs for each new project.

Under the 1993 DAMP, Permittees throughout the County required all projects (not just Priority Projects) to prepare a WQMP to identify permanent BMPs that will be included in the project. Therefore, the WQMP terminology will continue to be used within all jurisdictions, but the revised requirements described in this **DAMP Section 7** and associated Local Implementation Plan (LIP) (**DAMP Appendix A-7**) and Model WQMP (**Exhibit 7.II**) are intended to allow Project WQMPs to be consistent with both the WQMP requirements of the Santa Ana Permit and the SUSMP requirements of the San Diego Permit.

The remainder of this section describes the processes for incorporating the new Model WQMP requirements into the project planning and approval process and modifications to conditions of approval and plan check processes to assure consistency with Third Term Permit requirements. As stated previously, a Model WQMP is provided as **Exhibit 7.II**. The Model WQMP provides guidance for the development and review of Project WQMPs.

7.6.2 Project Review, Approval, and Permitting Process Overview

For all new development and significant redevelopment projects meeting the minimum requirements defined herein, a Project WQMP shall be developed to define the quality and

quantity of stormwater runoff must be considered during project planning to identify permanent (post-construction) BMPs that will be included in project design, constructed as part of the project, and ultimately implemented and maintained for the life of the project. Commitments from a project or permit applicant to incorporate, implement, and maintain the BMPs must be described in a Project WQMP.

The Third Term Permits require that the new WQMP and BMP requirements be enacted based on the following schedule, prior to these dates, projects, in both jurisdictions, will be required to prepare WQMP's in accordance with the 1993 DAMP :

Within the jurisdiction of the Santa Ana RWQCB – Upon approval of the Model WQMP by the Executive Officer but not later than October 1, 2003. This includes new development projects defined as projects for which tentative tract or parcel map approval was not received by July 1, 2003 and new re-development is defined as projects for which all necessary permits were not issued by July 1, 2003. This does not include projects receiving map approvals after July 1, 2003 that are proceeding under a common scheme of development that was the subject of a tentative tract or parcel map approval that occurred prior to July 1, 2003.

Within the jurisdiction of the San Diego RWQCB – Upon adoption of each Permittees local WQMP following submittal of this Model WQMP to the RWQCB. The local WQMP must be adopted not later than August 13, 2003. This includes priority projects that have not yet begun grading or construction activities. If a Permittee determines that lawful prior approval of a project exists, whereby application of WQMP requirements to the project is infeasible, WQMP requirements need not apply to the project.

Program Coverage and Definitions

Project WQMPs are required for private new development and significant redevelopment projects within Permittees' jurisdictions, and equivalent public agency capital projects undertaken by the Permittees for projects that:

- Qualify as one of the Priority Project Categories listed in **Table 7-1**, regardless of project size.

- Do not qualify as one of the Priority Project Categories but meet one of the following
  - Require discretionary action that will include a precise plan of development, except for those projects exempted by the Water Quality Ordinance (as applicable)
  - Require issuance of a non-residential plumbing permit

  Such projects will be referred to as "Non-Priority Projects."

The primary difference between a Priority Project and a Non-Priority Project is that Priority Projects will be required to include Treatment Control BMPs in project design. To ensure that Priority Projects, which require the incorporation of Treatment Control BMPs, are identified as early in the planning process as possible, the Permittees will utilize a checklist to document the

Table 7-1 Priority Projects Categories

1. Residential development of 10 units or more
2. Commercial and industrial development greater than 100,000 square feet including parking areas
3. Automotive repair shop (SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539)
4. Restaurant where the land area of development is 5,000 square feet or more including parking areas (SIC code 5812)
5. ***For San Diego Region -*** Hillside development greater than 5,000 square feet ***For Santa Ana Region -*** Hillside development on 10,000 square feet or more, which is located on areas with known erosive soil conditions or where natural slope in 25 percent or more
6. Impervious surface of 2,500 square feet or more located within, directly adjacent to (within 200 feet), or discharging directly to receiving water within Environmentally Sensitive Areas[1].
7. Parking lot area of 5,000 square feet or more, or with 15 or more parking spaces, and potentially exposed to urban runoff
8. ***For San Diego Region -*** Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater

[1] Environmentally Sensitive Areas are shown in maps available from the County and cities

identification of a project as a Priority Project or a Non-Priority Project (see the Local Implementation Plan **DAMP Appendix A-7**).

New Development - means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

Significant Redevelopment - means development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to:

- Expansion of a building footprint;
- Addition to or replacement of a structure;
- Replacement of an impervious surface that is not part of a routine maintenance activity; and
- Land disturbing activities related with structural or impervious surfaces.

Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots (if no additional impervious area is added); pedestrian ramps; and replacement of damaged pavement.

New development and significant redevelopment projects may fall into one of several categories:

- Following redevelopment, the entire development (including the redeveloped area) would meet one of the Project Priority categories listed in **Table 7-1**. The project would be considered a Priority Project and require a Project WQMP including Treatment Control BMPs. Where the significant redevelopment results in an increase of less than fifty percent of the impervious surface of a previously existing development, and the existing development was not subject to Project WQMP requirements, the treatment requirements apply only to the addition, and not to the entire development.

- Following redevelopment, the entire development (including the redeveloped area) would not meet one of the Project Priority categories listed in **Table 7-1**, but would require discretionary action that will include a precise plan of development, or require issuance of a non-residential plumbing permit. The project would be considered a Non-Priority Project and require a Project WQMP but would not require Treatment Control BMPs.

- The redevelopment activity would not result in a Priority Project as listed in **Table 7-1** and would not require discretionary action that will include a precise plan of development or issuance of a non-residential plumbing permit. The project would not require a Project WQMP.

Private Development WQMP Submittal

The Project WQMP may be prepared and submitted at one of two different points in project planning and permitting:

- During the discretionary approval process (land use permit) of a proposed project, when the Permittee must exercise judgment or deliberation in order to approve or disapprove a development or significant redevelopment project, or

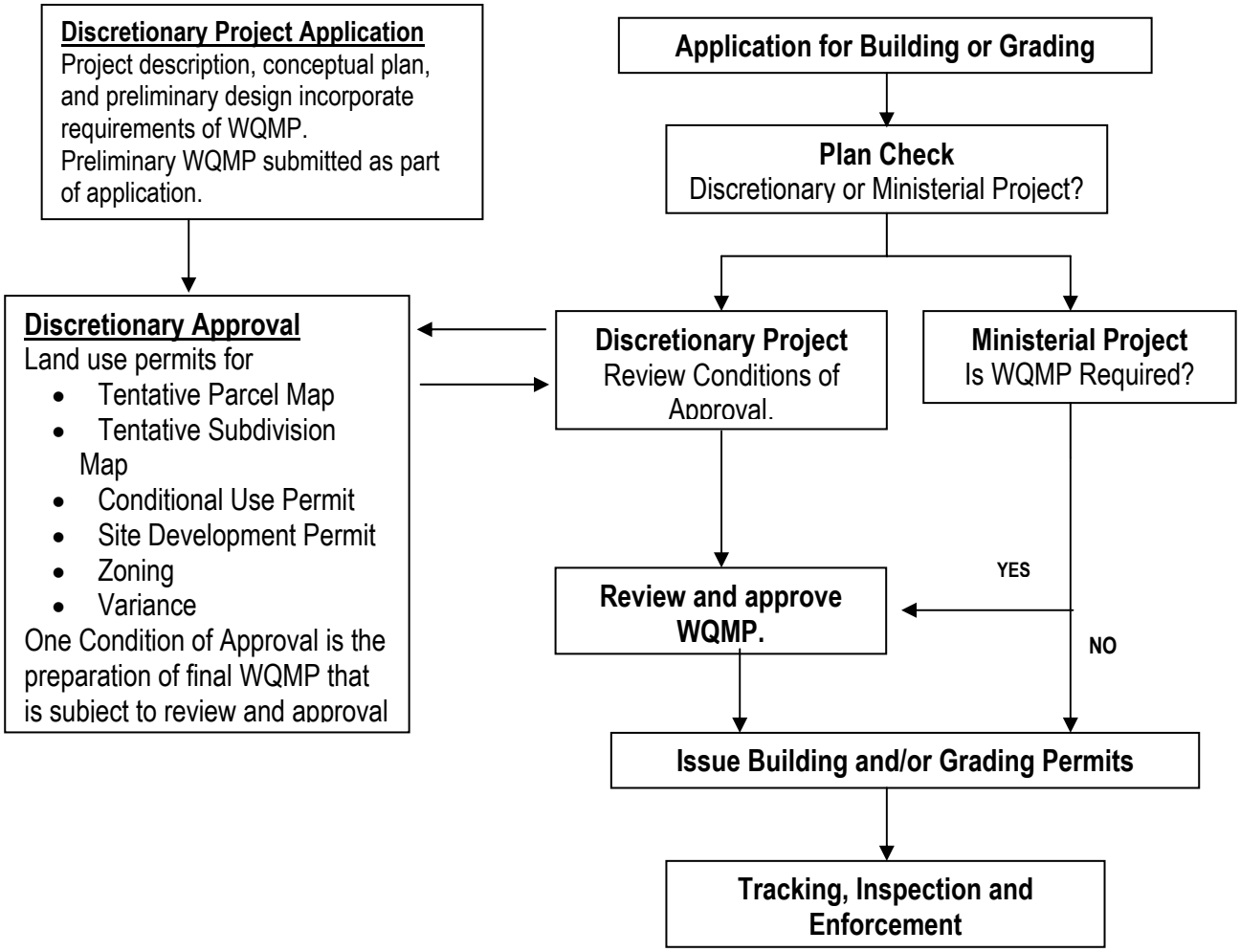
- During the ministerial approval process of issuing a grading, building, demolition, or similar "construction" permits in which only fixed standards or objective measures are applied.

Figure 7-3 depicts the primary steps in the process of reviewing, approving, and permitting a private new development or significant redevelopment project.

A discretionary action under CEQA is defined as "an activity which requires the public agency to exercise judgment in deciding whether to approve or disapprove the particular activity, as distinguished from situations where the public agency merely has to determine whether there has been conformity with applicable ordinances or other laws."[1] For proposed projects subject to discretionary approval, the Permittees will require a preliminary or conceptual Project WQMP as part of the application for project approval (land use entitlement) unless the project is

[1] California Public Resources Code § 21080(a); CEQA Guidelines § 15357.

Figure 7-3. Development Project Review, Approval and Permitting



subject to a regional or watershed program. The level of detail in a preliminary or conceptual Project WQMP submitted during the land use entitlement process will depend upon the level of detail known about the overall project design at the time project approval is sought.

Ministerial actions are those where little or no judgment or deliberation by a Permittee is required. Some ministerial approvals may require that the applicant prepare a Project WQMP, whereas other ministerial approvals may not necessitate a WQMP. For example, applications for grading or building permits for projects or activities that do not meet the requirements noted in Section 7.6.2 would not require the preparation of a Project WQMP as those projects are not expected to have the long-term potential to significantly affect stormwater quality.

Many projects will be subject to discretionary approval during the planning phase (land use entitlement) and ministerial approval for subsequent grading or building permits. For such projects, Project WQMPs may be submitted initially as "preliminary" or during the

discretionary approval process and submitted as "final" prior to approval of a grading or building permit. For projects subject to and consistent with regional or watershed programs, the project may rely upon the approved regional/watershed program document during the entitlement process, and may submit the final Project WQMP documentation in the format approved by the relevant permittee prior to obtaining ministerial permit(s).

Public Agency WQMP Submittal

The requirement for managing the quality and quantity of stormwater runoff from new development or significant redevelopment applies equally to private sector and public agency projects meeting the minimum requirements. In many public agencies the process for planning, design, approval, and oversight of public facilities differs from the process for private sector development projects. For example, typically private development projects are regulated through a process of a development plan approval (i.e., conditions of approval); building or grading permit applications, and permit conditions. Public agency projects in comparison may undergo design review by the contracting agency of the municipality; may or may not be issued permits or similar administrative authorizations; and are then regulated through the enforcement of contract terms and approved plans and specifications.

Further, the review, approval, and inspection of public agency projects and private sector development projects are frequently performed by different municipal departments. Recognizing the differences in the process, each Permittee will incorporate the requirement for a Project WQMP into the process of planning, design, approval, and oversight of their public agency projects or provide an equivalent approach. Typically, the Permittee's design/engineering department or the design architect/engineer contractor will prepare a WQMP for a public agency project.

Project WQMPs will not be required for public agency projects consisting of routine maintenance or emergency construction activities required to protect public health and safety; interior remodeling with no outside exposure of construction materials or construction waste to stormwater; mechanical permit work; electrical permit work; and sign permit work.

There are eight categories of Priority Projects listed in **Table 7-1**. Although public agencies do not plan and design some of these categories of projects per se, public agency projects may have similar functions or characteristics or may conduct similar activities after construction is completed. Therefore, some public agency projects should be considered Priority Projects. For example, a corporation yard may include a vehicle and equipment maintenance facility, which is very similar to an automotive repair shop. Other examples are a civic center or library that is very similar in its characteristics to that of a commercial office building and a senior citizens center or a jail may have a cafeteria, which is very similar to a restaurant.

For other public agency projects that are not Priority Projects, the Permittees may decide on a project specific basis not to require a WQMP, but may elect instead to require that all routine structural Source Control BMPs applicable to the project features be identified and included in the project, and Site Design BMPs be considered where applicable. Project types include, but are not limited to:

- Parks and recreation facilities
- Public Buildings
- Streets and roadways
- Above ground drainage facilities (e.g. channels and basins)

7.6.3 Conditions of Approval

The Permittees will review and revise their standard conditions of approval to ensure that the standard conditions are not in conflict with any provisions of the Santa Ana Region Permit or the San Diego Region Permit (as applicable), the DAMP, California's General Permit for Stormwater Discharges Associated with Construction Activity, California's General Permit for Stormwater Discharges Associated with Industrial Activity and adopted Total Maximum Daily Load allocations within their jurisdiction.

For example, a condition requiring "sweeping or washing public access points within 30 minutes of dirt deposition" should be revised to specify that "washing" must include capture and proper disposal of all wash water. A second example is that a standard condition requiring the applicant of a retail gasoline outlet or automotive vehicle repair facility to demonstrate coverage under the General Permit for Stormwater Discharges Associated with Industrial Activity prior to issuance of a preliminary or precise grading permit should not be used. Retail gasoline outlets and automotive vehicle repair facilities are not required to comply with California's General Permit for Stormwater Discharges Associated with Industrial Activity.

To minimize the short-term and long-term impacts on receiving water quality from new development and significant redevelopment, Permittees will review and revise or supplement their standard conditions of approval that may be used for projects to include the following conditions or the equivalent, as determined appropriate:

General Conditions

- Prior to the issuance of any grading or building permits (*add grubbing, clearing, surface mining or paving permits as appropriate)* for projects that will result in soil disturbance of one or more acres of land, the applicant shall demonstrate that coverage has been obtained under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

- Prior to the issuance of any grading or building permits (add or prior to recordation upon subdivision of land if determined applicable), the applicant shall submit for review and approval a Project WQMP that:
    - Discusses regional or watershed programs (if applicable)

- Addresses Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas
- Incorporates the applicable Routine Source Control BMPs as defined in the DAMP
- Incorporates Treatment Control BMPs as defined in the DAMP
- Generally describes the long-term operation and maintenance requirements for the Treatment Control BMPs,
- Identifies the entity that will be responsible for long-term operation and maintenance of the Treatment Control BMPS, and
- Describes the mechanism for funding the long-term operation and maintenance of the Treatment Control BMPs.

- Prior to grading or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall:

  - Demonstrate that all structural best management practices (BMPs) described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications,
  - Demonstrate that applicant is prepared to implement all non-structural BMPs described in the Project WQMP,
  - Demonstrate that an adequate number of copies of the project's approved Project WQMP are available for the future occupiers,
  - Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs.

Projects Adjacent to Beaches

- During the construction phase, the applicant shall comply with the following requirements:
  - All construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into coastal waters by wind, rain, tracking, tidal erosion or dispersion.

- Grading and Drainage Plans shall be prepared with the following design objectives:

  - All surface runoff and subsurface drainage shall be directed to the nearest acceptable drainage facility, via sump pumps if necessary, as determined by the Building Official.
  - Onsite surface drainage and subdrain systems shall not discharge over the blufftop or hilltop.
  - All roof drains shall be required to connect into a tight-line drainage pipe or concrete swales that drain to the nearest acceptable drainage facility as determined by the Building Official.
  - Landscaping plans shall utilize only native, drought-tolerant landscape materials.
  - Irrigation system plans shall not include irrigation lines for the bluff-side of the parcel.

- All grading and improvements shall be made in accordance with the Grading Ordinance and to the satisfaction of the Building Official or designee. Grading shall be in substantial compliance with the approved grading plans. Surety to guarantee the completion of grading, erosion and sediment control measures shall be posted satisfactory to the Building Official.

Projects in Hilly Areas

- Drainage facilities discharging onto adjacent property shall be designed to imitate the manner in which runoff is presently crossing the adjacent property. Alternatively, the project applicant may obtain a drainage acceptance and maintenance agreement, suitable for recordation, from the owner of said adjacent property.

Industrial Facilities

- For industrial facilities subject to California's General Permit for Stormwater Discharges Associated with Industrial Activity as defined by Standard Industrial Classification (SIC) code, prior to grading or building permit close-out and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall demonstrate that coverage under the permit has been obtained providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing.

Special Conditions

- Prior to the issuance of any grading and building permits, the applicant shall include in the plans all BMPs identified in the approved WQMP and any other urban runoff and stormwater pollution control measures deemed necessary by the City/County Planning Director.

- Prior to issuance of certificates of use and occupancy or building permits for individual tenant improvements or construction permits for a tank or pipeline, uses shall be identified and, for specified uses, the applicant shall propose plans and measures for chemical management (including, but not limited to, storage, emergency response, employee training, spill contingencies and disposal). The chemical management measures shall be incorporated as an element of a Project WQMP and shall be subject to the approval of the Planning and Development Services Department and other specified agencies such as the Orange County Fire Authority, the Orange County Health Care Agency and sewering agencies (as appropriate) to ensure implementation of each agency's respective requirements. Certificates or permits may be ministerially withheld if features needed to properly manage chemicals cannot be incorporated into a previously completed building, center or complex.

7.6.4 Review and Approval of WQMPs

Project WQMPs may be submitted as "preliminary" during the discretionary or land use entitlement phase depending upon the level of detail known about the overall project design at the time project approval is sought. However, prior to issuance of grading or building permits, the project applicant must submit the final Project WQMP for review and approval.
The review and approval of a final Project WQMP is one of the last critical points at which a Permittee can impose conditions or standards that will minimize the impacts of urban runoff and stormwater pollution on local water resources. The Model WQMP (**Exhibit 7.II**) is expected to be used as a guide for preparation of a Project WQMP. To ensure that Priority Projects, which require the incorporation of Treatment Control BMPs, are properly identified, the Permittees will utilize a checklist to document the identification of a project as a Priority Project or a Non-Priority Project and to assure thorough and consistent reviews of Project WQMPs, the Permittees will utilize a WQMP Review Checklist (see LIP, **DAMP Appendix A-7** for the checklists). The Model WQMP may also be used to aid in review.

WQMP Elements

The Project WQMP is expected to address water quality BMPs applicable to the project to address pollutants or conditions of concern. The BMPs required vary for Priority Projects versus Non-Priority Projects.

The Project WQMP for a Priority Project must address:

- Regional or watershed programs (if applicable)
- Routine structural and non-structural Source Control BMPs
- Consideration of Site Design BMPs (as applicable)
- Treatment Control BMPs (Treatment Control BMP requirements may be met through either project specific (on-site) controls or regional or watershed management controls that provide equivalent or better treatment performance, subject to certain conditions described in the Model WQMP))
- The mechanism(s) by which long-term operation and maintenance of all structural BMPs will be provided.

The Project WQMP for a Non-Priority Project must address:

- Routine structural and non-structural Source Control BMPs
- Consideration of Site Design BMPs (as applicable)
- The mechanism(s) by which long-term operation and maintenance of all structural BMPs will be provided.

The categories of stormwater pollution control BMPs (Source Control, Site Design, and Treatment Control) are summarized in **Table 7- 2**, together with applicable projects and primary pollution prevention objectives of the BMPs. Each of the BMP categories is further defined in subsequent sections.

When reviewing WQMPs submitted for approval, Permittees will assess project impacts on receiving waters and potential cumulative impacts of build-out within the watershed based upon available watershed chapters of the DAMP, information learned from any CEQA documentation regarding the project, and Permittee knowledge of watershed-wide and jurisdictional problems and programs. Additionally, Permittees are to examine all identified BMPs, as a whole, address the pollutants/condition of concern identified within the WQMP.

The Project WQMP is a project planning level document and as such is not expected to contain final BMP design drawings and details. However, the project WQMP must identify and locate selected BMPs, provide design parameters including hydraulic sizing of treatment BMPs and convey final design concepts. BMP fact sheets can be used in conjunction with project-specific design parameters and sizing to convey design intent. There are a number of resources listed in the Model WQMP for Source Control, Site Design, and Treatment Control BMPs that should be considered to guide the design and implementation of the BMPs. . Fact sheets from one available reference - the 2003 California Stormwater Quality Association the California Stormwater Best Management Practice Handbook – New Development and Redevelopment are provided in the Local Implementation Plan (**DAMP Section A-7)**. The fact sheets contain detailed descriptions of each BMP, applications, advantages/disadvantages, design criteria, design procedure, and inspection and maintenance requirements to ensure optimal performance of the BMPs

Table 7- 2. Summary of BMPs for Development/Redevelopment Projects

BMP Category		Applicable Projects	Pollution Prevention Objective
Source Control BMPs	**Routine Non-Structural BMPs**	Required for all projects – as applicable	Prevent pollution by educating the public on proper disposal of hazardous or toxic wastes, regulatory approaches, street sweeping and facility maintenance, and detection and elimination of illicit connections and illegal dumping
	Routine Structural BMPs	Required for all projects – as applicable. Include incorporating requirements applicable to individual priority project categories • Private roads • Residential driveways and guest parking • Dock areas • Maintenance bays • Vehicle wash areas • Outdoor processing areas • Equipment wash areas • Parking areas • Roadways • Fueling areas • Hillside landscaping • Wash water control for food preparation areas • Community car wash racks	Prevent potential pollutants from contacting rainwater or stormwater runoff or to prevent discharge of contaminated runoff to the storm drain system or receiving waters. Reduce the creation or severity of potential pollutant sources or to reduce the alteration of the project site's natural flow regime

Site Design BMPs	All projects should consider implementation of Site Design BMPs	Minimize or prevent potential pollutants from contacting rainwater or stormwater runoff or to prevent discharge of contaminated runoff to the storm drain system or receiving waters.
Treatment Control BMPs or Regional Program	All priority projects – at least one Treatment Control BMP required	Remove pollutants from stormwater runoff prior to discharge to the storm drain system or receiving waters

Projects utilizing a regional or watershed program will pre-determine BMPs as discussed in the Model WQMP, Exhibit 7,II.

Structural Source Control BMPs

Structural Source Control BMPs are low-technology practices designed to prevent pollutants from contacting stormwater runoff or to prevent discharge of contaminated runoff to the storm drainage system. Site-specific structural Source Control BMPs have been established for a number of common site features such as outdoor material storage areas, trash storage, outdoor loading/unloading docks, outdoor repair and maintenance areas, outdoor washing areas, outdoor fueling areas, and parking lots. Typical required design features include berms, covers, screens, signage, grading, sanitary sewer connections, and emergency storm drain seals. Fact sheets detailing these BMPs are presented in the Local Implementation Plan (**DAMP Section A-7).** The fact sheets include design criteria established to ensure effective implementation of the required Source Control BMPs.

Site Design BMPs

Site Design BMPs prevent pollution of stormwater by minimizing the introduction of pollutants and conditions of concern that may result in significant impacts generated from site runoff to the stormwater conveyance system. Site Design BMPs should be considered for all projects including regional or watershed programs. Site Design BMPs include the following design features and considerations:

- Control Peak Stormwater Runoff Discharge Rates
- Minimize Project's Impervious Footprint
- Conserve Natural Areas
- Minimize Directly Connected Impervious Areas (DCIAs)
- Protect Slopes and Channels

Fact sheets are presented Local Implementation Plan (**DAMP Appendix A-7)**. The fact sheets include design criteria established to ensure effective implementation of the required Site Design BMPs.

Treatment Control BMPs

Treatment Control BMPs are engineered technologies designed to remove pollutants from stormwater runoff and are required to augment Source Control and Site Design BMPs for Priority Projects to reduce pollution from stormwater discharges. The type of Treatment

Control BMP(s) to be implemented at a site depends on a number of factors including: type of pollutants in the stormwater runoff, volume or flow of stormwater runoff to be treated, project site conditions, receiving water conditions, and General Industrial Permit requirements, when applicable. Land requirements, and costs to design, construct and maintain Treatment Control BMPs vary by Treatment Control BMP.

Fact sheets are presented the Implementation Plan (**DAMP Appendix A-7**). The fact sheets include design criteria established to ensure effective implementation of the required Treatment Control BMPs.

Regional or Watershed BMPs

Regional or watershed BMPs that are designed to address runoff from new development and significant redevelopment projects may be used to meet the treatment BMP requirement. If this method is selected, the BMPs must be designed to provide equivalent treatment objectives for the new development and significant redevelopment projects for the entire area or the new development and significant redevelopment projects served by the regional or watershed BMPs. Detailed analysis (such as detailed planning and modeling) should be employed and cross-jurisdictional issues must be clearly defined and coordinated.

BMP Design Standards

An intensive search was conducted in order to find agencies that may have developed standard plans (details) for Treatment Control BMPs. The search concluded that many entities throughout the country that have developed graphic depictions of Treatment Control BMPs, but no standard plan-level details have been developed at this time.

The California Department of Transportation (Caltrans) has "as-built" drawings for their pilot treatment BMPs. The "as-built" drawings are available directly from Caltrans. Design guidelines and detailed schematics are available from several sources including EPA (various dates), the Urban Drainage and Flood Control District (Denver Colorado, September 1999), and the Caltrans Project Planning and Design Guide (May 2002). These references provide schematics for biofilters (grass swales), extended detention basins, sand filters, wetlands, and other treatment BMPs. No standard BMP plans have been adopted by any of the Permittees.

One reference for designing permanent BMPs is the 2003 California Stormwater Best Management Practice Handbook – New Development and Redevelopment . Many other resources available for consultation are listed in the Model WQMP (**Exhibit 7.II Attachment D**).

7.6.5 Plan Check: Issuance of Grading or Building Permits

Once a project reaches the plan check phase, the applicant must have an approved final Project WQMP, since the construction plans submitted by the applicant for plan check must incorporate all of the structural BMPs identified in the approved Project WQMP. Therefore, the Permittees will encourage (but not necessarily require) applicants to obtain approval of the project's final Project WQMP prior to submitting construction plans for plan check.

Standard Notes for Plan Sheets

Prior to the issuance of a grading or building permit, Permittees shall require the permit applicant to include the following as general or special notes on the plan sheets for new development or significant redevelopment projects:

- Sediment from areas disturbed by construction shall be retained on site using structural controls to the maximum extent practicable.
- Stockpiles of soil shall be properly contained to eliminate or reduce sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
- Appropriate BMPs for construction-related materials, wastes, spills or residues shall be implemented to eliminate or reduce transport from the site to streets, drainage facilities, or adjoining properties by wind or runoff.
- Runoff from equipment and vehicle washing shall be contained at construction sites unless treated to reduce or remove sediment and other pollutants.
- All construction contractor and subcontractor personnel are to be made aware of the required best management practices and good housekeeping measures for the project site and any associated construction staging areas.
- At the end of each day of construction activity all construction debris and waste materials shall be collected and properly disposed in trash or recycle bins.
- Construction sites shall be maintained in such a condition that a storm does not carry wastes or pollutants off the site. Discharges other than stormwater (non-stormwater discharges) are authorized under California's General Permit for Storm Water Discharges Associated with Construction Activity only where they do not cause or contribute to a violation of any water quality standard and are controlled through implementation of appropriate BMPs for elimination or reduction of pollutants. Non-stormwater discharges must be eliminated or reduced to the extent feasible.

  Potential pollutants include but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, solvents, detergents, glues, lime, pesticides, herbicides, fertilizers, wood preservatives, and asbestos fibers, paint flakes or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator or battery fluids; concrete and related cutting or curing residues; floatable wastes; wastes from engine/equipment steam cleaning or chemical degreasing; wastes from street cleaning; and super-chlorinated potable water from line flushing and testing.

  During construction, disposal of such materials should occur in a specified and controlled temporary area on-site physically separated from potential stormwater runoff, with ultimate disposal in accordance with local, state and federal requirements.

- Discharging contaminated groundwater produced by dewatering groundwater that has infiltrated into the construction site is prohibited. Discharging of contaminated soils via

surface erosion is also prohibited. Discharging non-contaminated groundwater produced by dewatering activities requires a National Pollutant Discharge Elimination System (NPDES) permit from the respective State Regional Water Quality Control Board.

Plan Check for Projects with Land Use Permits

For projects with land use permits, the environmental (CEQA) documentation (including the Mitigation Monitoring and Reporting Program), the conditions of approval, and the approved Project WQMP shall be reviewed for an understanding of the water quality issues and structural BMPs required. Construction plans shall be reviewed for conformity with the project's approved final Project WQMP. If the selected BMPs were approved in concept during the land use entitlement process, the applicant shall submit detailed construction plans showing locations and design details of all BMPs that are in substantial conformance with the preliminary approvals. The construction plans shall be reviewed to assure that the plans are consistent with the BMP design criteria and guidance provided in **Exhibit 7.II**.

Plan Check for Projects with By-Right Zoning (Ministerial Projects)

For projects with by-right zoning or projects that do not need discretionary review, applicants will typically submit a grading or building permit application consisting of a proposed Project WQMP and construction plans that incorporate the BMPs included in the proposed Project WQMP. The Permittee shall first review the proposed Project WQMP for conformity with the requirements described in **Exhibit 7.II**. The approved Project WQMP shall then be used in reviewing the construction plans for consistency with the BMP design criteria and guidance provided in **Exhibit 7.II**.

Design Review for Public Agency Projects

Prior to initiating grading or construction activities, Permittees shall ensure that the construction plans for public works projects reflect the structural BMPs described in the approved Project WQMP. The design review for public agency projects shall include a review of construction plans and specifications for conformity with the approved Project WQMP and for consistency with the BMP design criteria and guidance provided in **Exhibit 7.II.**

*Plan Check for Projects with Alternative Treatment Control BMPs (see **Exhibit 7.II, Section 3.3.3**)*

An applicant may choose to incorporate into a Project WQMP and construction plans Treatment Control BMPs that are not included in the Treatment Control BMP Selection Matrix provided in the Model WQMP. If an applicant chooses to utilize Alternative Treatment Control BMPs, the Permittee shall require the project's engineer of record to certify the Alternative Treatment Control BMPs as being equally or more effective in pollutant reduction than comparable BMPs found in the Model WQMP.

7.6.6 Permit Closeout, Certificates of Use, and Certificates of Occupancy

The Project WQMP continues with the property after the completion of the construction phase and the Permittees may require that the terms, conditions and requirements be recorded with the County Recorder's office by the property owner or any successive owner as authorized by the Water Quality Ordinance. In lieu of recordation the Permittee may require the Project WQMP to include notice of transfer responsibility. The end of the construction phase therefore represents a transition from the New Development/Significant Redevelopment Program to the Existing Development Program (**DAMP Section 9**). Accompanying this is a close out of permits and issuance of certificates of use and occupancy. The Permittees will use this juncture to assure satisfactory completion of all requirements in the Project WQMP by requiring the applicant to:

- Demonstrate that all structural BMPs described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications,
- Prepare and submit for review and approval by the Permittee an O&M Plan for all structural BMPs,
- Demonstrate that a mechanism or agreement acceptable to the Permittee has been executed for the long-term funding and performance of BMP operation, maintenance, repair, and/or replacement.
- Demonstrate that the applicant is prepared to implement all non-structural BMPs described in the Project WQMP,
- Demonstrate that an adequate number of copies of the Project WQMP are available onsite, and
- For industrial facilities subject to California's General Permit for Stormwater Discharges Associated with Industrial Activity as defined by Standard Industrial Classification (SIC) code, demonstrate that coverage has been obtained by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the notification of the issuance of a Waste Discharge Identification (WDID) Number.

An approved Project WQMP defines the permanent (post-construction) BMPs that will be implemented to provide long-term runoff management once the project is operational or occupied, and also describes the mechanism by which long-term operation and maintenance will be provided. A structural BMP is not considered effective unless a mechanism is in place to provide for long-term reliability, which is achieved through proper operation and maintenance. Therefore, once construction of a new development or significant redevelopment project is complete, assurance is required for the long-term operation and maintenance of structural BMPs, and most particularly for Treatment Control BMPs.

An O&M Plan for structural BMPs will be prepared by the applicant for private sector projects or by a Permittee's design/engineering department or the design architect/engineer contractor

for public agency projects. At a minimum, annual inspection and maintenance of all structural BMPs shall be required.

The O&M Plan that is prepared by the applicant for private sector projects shall describe and/or include:

- Structural BMPs
- Employee responsibilities and training for BMP operation and maintenance
- Operating schedule
- Maintenance frequency and schedule
- Specific maintenance activities
- Required permits from resource agencies, if any
- Forms to be used in documenting maintenance activities
- Recordkeeping requirements (at least 5 years)

At a minimum, an annual inspection frequency will be established for all structural BMPs including inspection and performance of any required maintenance prior to the start of the rainy season.

The ownership, operation, and maintenance of structural BMPs may be the responsibility of a private entity or a public agency (for example, a Permittee) under various arrangements and with various funding sources. The responsibility to provide for the long-term operation and maintenance of structural BMPs associated with private development projects may:

- Remain with a private entity (property owner, home owners association, etc.); or
- Be transferred to a public entity (e.g., a city, county, special district, etc.) through dedication of the property; or
- Be transferred to a public entity, or another private party through a contract.

Following satisfactory inspection, the Permittee will accept structural BMPs within public right-of-ways, or on land dedicated to public ownership. Upon acceptance, responsibility for operation and maintenance will transfer from the developer or contractor to the appropriate Permittee department, including the funding mechanism identified in the approved Project WQMP. If a property owner or a private entity, such as a homeowners association (HOA), retains or assumes responsibility for operation and maintenance of structural BMPs, the Permittee shall require access for inspection through an agreement.

If the Permittee will be responsible for operating and maintaining structural BMPs on private property, an easement will be established to allow for entry and proper management of the BMPs. Such access easements shall be binding throughout the life of the project, or until the BMPs requiring access are acceptably replaced with a BMP not requiring access. Funding for the long-term operation and maintenance of structural BMPs will be front-funded, or otherwise

guaranteed via mechanisms such as approved assessment districts, or other funding mechanisms.

Public Agency Projects

For public agency projects, upon completion of construction when contract close-out occurs the responsibility for operation and maintenance of the structural BMPs will transfer from the contractor to the appropriate Permittee department and become part of the Municipal Activities Program (**DAMP Section 5**). The Permittee has the authority to approve the transfer of structural BMPs to any other public entity within its jurisdiction and shall negotiate satisfactory operation and maintenance standards with the public agencies accepting the operation and maintenance responsibilities. Alternatively, the responsibility for the operation and maintenance of structural BMPs may be transferred to a private entity through contracts or lease agreements. In any such transfer agreement, the Permittee shall be identified as a third-party beneficiary empowered to enforce maintenance agreements.

7.7 Post Construction BMP Inspection and Verification

Verification of the implementation and O&M of structural and non-structural BMPs will be performed by the Permittee. Assessment of BMP effectiveness will take place during verification.

The City/County will perform verification at 90% of developments with approved Project WQMPs. The number of verifications necessary to achieve the above goal will be based on either the total area of approved Project WQMP projects, or the total number of Project WQMPs approved. The implementation of BMPs, and ongoing maintenance of BMPs by the mechanisms described in the Project WQMP will be verified.

Verification of BMP implementation and ongoing O&M will be conducted by inspection, self-certifications, surveys, or other equally effective approaches. An assessment report will be produced each year describing BMP implementation and ongoing O&M effectiveness, for submittal with the Permittee's annual progress report.

Verification of BMP implementation of Public Agency Projects will be incorporated into each Permittees Municipal Activities Program.

7.8 Model Program Training and Outreach

Education and training of municipal and/or other agency staff is one of the keys to a successful stormwater program. To assist the responsible municipal and private development staff in understanding the Model Program, two training modules are currently being developed and will be held by the Principal Permittee (**DAMP Appendix B-7**).

In addition to the Permittee sponsored training, the Permittees are also encouraged to attend training seminars or workshops related to stormwater management and water quality conducted by other organizations.

7.8.1 Training Modules

Two training modules have been prepared that cover different aspects of the Model Program. These modules are provided in **DAMP Appendix B-7**.

*New Development/Significant Redevelopment Program Management (**DAMP Appendix B, Exhibit B-7.I**)*

This training module is generally targeted for Permittee Stormwater Program managers and the managers of a Permittee's planning and building departments. It provides an overview of the Stormwater Program as it pertains to a Permittee's General Plan, the preparation and review of environmental documents (Initial Studies, EIRs, EISs, Negative Declarations, Mitigated Negative Declarations, etc.), conditions of approval for projects, the review of Project WQMPs, plan check, and permit closeout. The training module also briefly describes a Permittee's responsibility for verifying and inspecting permanent BMPs and for assessing the effectiveness of the New Development/Significant Redevelopment Program element.

*Project Planning and Design: Environmental Review, Planning and Permitting, and WQMP Development (**DAMP Appendix B, Exhibit B.7.II**)*

This training module is generally targeted for planners, plan checkers, developers and engineers, and will address: the laws and regulations applicable to new development and significant redevelopment; the connection between new development and significant redevelopment and water quality; how to review and prepare CEQA compliance documents with regard to urban runoff and stormwater pollution effects, how to develop and review a Project WQMP; and how to design and incorporate into a project Source Control, Site Design and Treatment Control BMPs to minimize impact to receiving waters.

7.9 Program Effectiveness Assessment

The overall Program Effectiveness Assessment (PEA) serves as the foundation for the submittal of the Annual Progress report that is submitted each year to the Principal Permittee and subsequently to the Regional Boards and serves as the basis for evaluating each municipality's individual new development and significant redevelopment efforts (See **DAMP Appendix C-7**).

By completing the effectiveness assessment, the Permittees will each have a baseline by which they can compare subsequent evaluations and identify trends. This information can then be used to determine where modifications within the program may be necessary and ensures that the iterative evaluation and improvement process is applied to the program component and used as an effective management tool.